

**REMARKS**

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

**I. CLAIM STATUS & AMENDMENTS**

Claims 1-8 and 133 were pending in this application when last examined.

Claims 1, 2 and 6 were examined on the merits and stand rejected.

Claims 4, 5, 7, 8 and 133 were withdrawn as non-elected subject matter. The Office did not indicate the status of claim 3. Presumably, claim 3 should have been included in the list of withdrawn claims.

Claims 1-5, 7 and 133 have been cancelled without prejudice or disclaimer thereto. Applicants reserve the right to file a continuation or divisional application on any cancelled or withdrawn subject matter.

Applicants are grateful to the Examiner for examining SEQ ID NOS: 96 and 97 together in the instant application.

Claim 6 has been amended into a process claim for using the elected proteins of SEQ ID NOS: 96 and 97 for inhibiting formation of a complex.

New claim 134 has been added.

Claim 6 has been amended to include that which was indicated as supported in the disclosure by the Office. Support for amended claim 6 and new claim 134 can be found in the disclosure, for example, at page 22, lines 1-8 and lines 21-37, page 37, lines 34-36 and page 42, lines 8-15 and original claims 6 and 8. Based on this disclosure, the interaction in claim 6 is one resulting in complex formation as apparent from the Examples, where complex formation is detected. It is further apparent from this disclosure that the inhibitor of the formation of the complex is used by adding it to a system where the complex is to be formed. No new matter has been added.

Kindly examine amended claim 6 and new claim 134 with the elected invention as they are directed to a method of using the elected protein.

Claims 6 and 134 are pending upon entry of this amendment.

## **II. CLAIM OBJECTION**

On page 3 of the Office Action, claims 1-2 and 6 were objected to for containing non-elected subject matter, specifically, the non-elected SEQ ID NOS.

The present amendment overcomes this objection by removing the non-elected sequences.

## **III. WRITTEN DESCRIPTION REJECTION**

On pages 3-6 of the Action, claims 1-2 and 6 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement for the broad genus of polypeptides encompassed by the language “including deletion, substitution or addition of one or several amino acid residues.”

This rejection is respectfully traversed as applied to the amended and new claims.

To start, please note the claims have been amended such that the number of the deletion, substitution or addition is limited to one amino acid residue. Further, the amended claim requires the modified protein to have the functional property “which interacts with the c-Fos protein.” As such, it is respectfully submitted that the claims are not directed to a vast number of modified sequences.

Further, it is well known in the art that there are conservative modifications which do not alter the function of a protein. Once the function of a protein is identified, such modifications can be easily selected by using ordinary and routine screening methods and procedures. It is not necessary for one using mutagenesis and screening techniques to specifically know what modification should occur in advance.

In this regard, at page 2 of the Action, the Office acknowledges that the specification discloses at least one such modified protein. For instance, the Office acknowledges that the working example of the bovine sequence (i.e., the nucleic acid encoding the polypeptide of SEQ ID NOS: 96-97). In doing so, it is clear that the specification discloses that SEQ ID NO: 97 possesses a substitution of Serine for Phenylalanine (a non-conservative substitution), and still retains functionality.

In view of the knowledge in the art, even if the exact sequence of the modified protein is not described, one skilled in the art could reasonably recognize that the inventors had possession of the modified proteins, including a deletion, substitution or addition of one amino residue.

Thus, the 112, first paragraph, written description rejection of claims 1-2 and 6 is untenable and should be withdrawn.

#### **IV. INDEFINITENESS REJECTION**

Claim 6 was rejected under 35 U.S.C. § 112, second paragraph, on the basis it is unclear what specific interaction that is inhibited for the reasons set forth on page 6 of the Action.

The present amendment overcomes this rejection. Specifically, claim 6 has been amended to specify what type of interaction is intended to be inhibited. In particular, the amended claim clarifies that the formation of a complex between a target protein that interacts with a c-Fos protein and the c-Fos protein is to be inhibited.

Thus, in view of the above amendment, the rejection of claim 6 is untenable and should be withdrawn.

#### **V. NON-STATUTORY SUBJECT MATTER**

On pages 6-7 of the Action, claims 1-2 and 6 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. The Office contends the claimed polypeptide reads on a product of nature.

The present amendment overcomes this rejection. In particular, claims 1 and 2 have been canceled, and claim 6 has been amended to a method of using the protein.

Thus, this rejection is untenable and should be withdrawn.

## **VI. ANTICIPATION REJECTION**

On pages 7-8 of the Action, claims 1-2 and 6 were rejected under 35 U.S.C. § 102(b) as anticipated by Kumar (US 6,310,048). The Office argues that Kumar discloses a polypeptide that shares 100% sequence identity to the SEQ ID NO: 96 (as evidenced by the sequence alignment attached to the Action).

The present amendment overcomes this rejection. As noted above, claims 1 and 2 have been canceled, and claim 6 has been amended to a method of using the protein.

To anticipate a claim, a cited prior art reference must teach each and every element of the claimed invention. See M.P.E.P. § 2131.01.

Kumar is silent about the ability of interacting with a c-Fos protein. Kumar is also silent about using the protein in a method for inhibiting complex formation between a target protein and the c-Fos protein. Therefore, Kumar fails to disclose or suggest the claimed method for inhibiting the formation of the complex between the c-Fos protein and another (target) c-Fos-interacting protein.


**CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

Respectfully submitted,

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